

SHARP®**SERVICE MANUAL**SE0014LT45C00
Issued : 10 June 2004**AK-36 CHASSIS**

PAL SECAM B/G, L, L', D/K SYSTEM COLOUR TELEVISION

**MODEL 14LT-45C**

In the interests of user safety (required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

In order to service the model 14LT-45C, refer to the AK-36 Chassis Service Manual (SE00AK36CHA00).

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SHARP CORPORATION

This document has been published to be used for after sales service only.

SERVICE MANUAL UPDATE LOG SHEET

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Use this page to keep any special servicing information as Technical Report (Bulletin), Technical Information, etc.
If only part number changes are required, just change part number directly the part number in the Parts Listing Section.
If you need more information, please refer to the Technical Report (Bulletin).

ELECTRICAL SPECIFICATIONS

•Power Input 220V-240 Volts AC 50 Hz

•Power Consumption

Normal Operation (Method IEC60107) 40 W

Stand-by Operation < 10 W

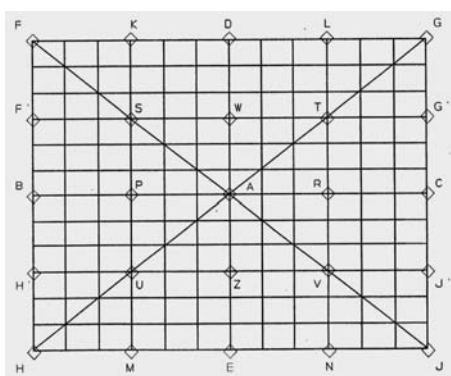
•Audio Power Output Rating (MPO) / Impedance

Internal Speaker 2.5 W, 16 Ω

•Speakers

Speaker 7.2 mm Round

•Convergence (Maximum Misconvergence)



AREA	14" - 17"
A	0.3
BC	0.8
DE	0.8
FGHJ	1.3
KLMN	1.0
F'G'H'J'	1.0
STUV	0.9

•Picture Intermediate frequency

L' 33.9MHz

L, B/G, D/K 38.9MHz

•Sound Carrier Trap

L' 40.4MHz

L, D/K 32.4MHz

B/G 33.4MHz

•Adjacent Sound Carrier Trap

L' 32.4MHz

L, D/K, B/G 40.4MHz

•Adjacent Picture Carrier Trap

L' 41.9MHz

L, D/K 30.9MHz

B/G 31.9MHz

•Aerial Input Impedance

VHF/UHF 75 ohm Unbalanced

•Tuning Ranges 48.25MHz thru 855.25 MHz

VHF: S1 - S41 CH (Hiperband)

E2 - E12 / F2 - F10

UHF: E21 - E69

VHF: OIRT R1-R12

•White Level

Apply the rated voltage at the rated frequency to the TV set, while it is receiving full white pattern RF signal of 60 dB/ μ V from its RF input via the pattern generator.

Turn all picture controls to maximum value. Measure the colour temperatures at the center of the screen by using the colour analyzer.

X=0.304 $\pm$ 0.015

Y=0.306 $\pm$ 0.015

Specifications are subject to change without prior notice.

MODEL DESTINATION (Operation Manual Languages)

14LT45C: Czech, English, Hungarian, Polish, Romanian, Russian, Slovakian

WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis.

To prevent electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

IMPORTANT SERVICING NOTES

Only qualified service personnel are allowed to carry out maintenance and repair of this receiver.

Servicing of High Voltage System and CRT

It is important that the static charge is removed from the high voltage system when carrying out work on the receiver. This can be achieved by connecting a 10K resistor (with a suitably insulated lead) from the CRT cavity connector to the CRT ground tag. This must be carried out with the AC supply disconnected from the receiver.

Note the following:

- The CRT in this receiver employs Integral Implosion Protection.
- If the CRT has to be changed it **MUST** be replaced with the correct type for continued safe working.
- **DO NOT** lift the CRT by its neck.
- When handling the CRT, ensure that shatterproof goggles are worn.
- Ensure that the CRT is discharge before handling.

X-Ray

This receiver is designed to keep any x-ray emission to an absolute minimum. Some fault conditions and servicing procedures may produce potentially hazardous x-ray radiation levels. This is a problem when in close proximity to the receiver for long periods of time. To reduce any risks associated with this, please observe the following precautions:

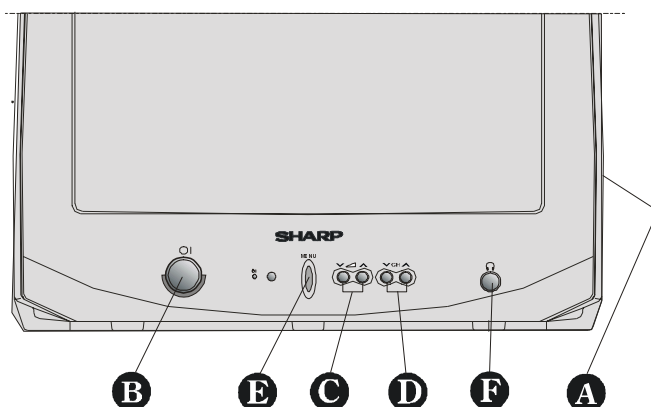
1. When undertaking any servicing on this chassis, **DO NOT** increase the EHT to more than 27.5 KV, (at a instantaneous beam current of 1000 μ A).
2. Ensure that during normal operation the EHT does not exceed 25.6 KV (at a beam current of 800 μ A). This level has been preset in the factory. Always check that this level has not been exceeded after carrying out any repair on the receiver.
3. **DO NOT** replace the CRT with any other type than that specified in the parts listing as this may cause excessive x-ray radiation.

Before returning the receiver to the customer

In addition to the above checks, the following should also be carried out before returning the receiver to the customer.

1. Inspect all the leads to ensure that they are dressed correctly and that they are not obstructed or pinched by any other parts.
2. Ensure that all protective devices are in good condition. These will include nonmetallic control knobs, insulating fish papers, cabinets backs, compartment covers or shields, mechanical insulators, etc.

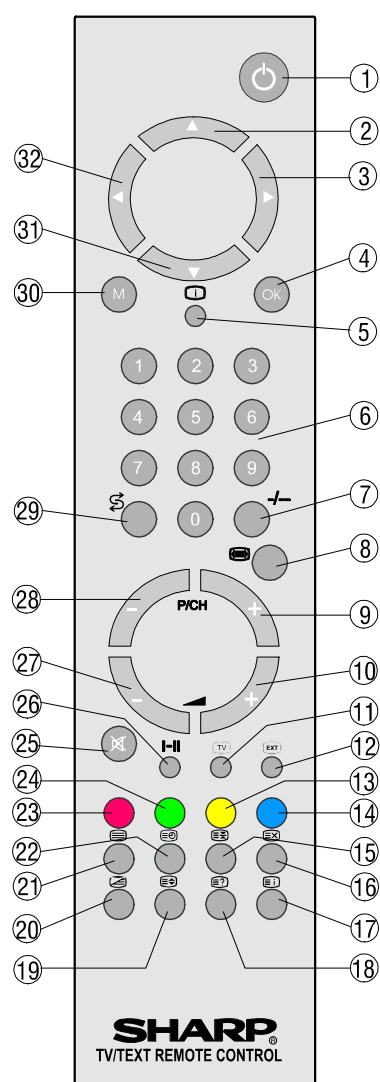
CONTROLS & TERMINALS



- A** Speaker
- B** = Power On / Off
- C** = Volume +/-
- D** = Program +/-
- E** MENU = Menu
- F** = Headphone 3,6 mm Ø

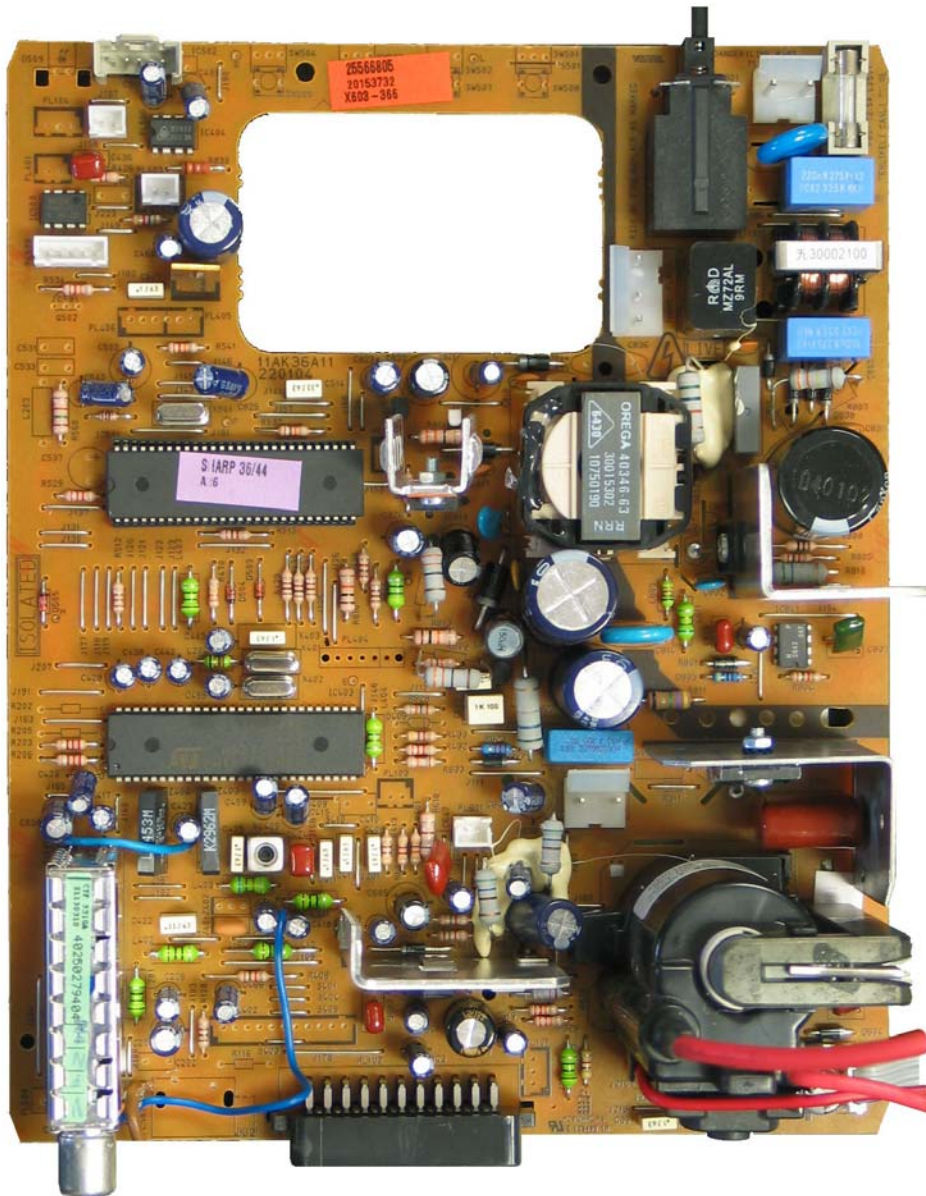
REMOTE CONTROL

- ① = Stand By
- ② = Cursor Up
- ③ = Cursor Right
- ④ OK = OK
- ⑤ = Info (Program Menu)
- ⑥ 0 - 9 = Direct Program
- ⑦ -/-- = Double Digit
- ⑧ = Wide mode button
- ⑨ P/CH+ = Program +
- ⑩ = Volume +
- ⑪ = TV / Quit Menu
- ⑫ = EXT button
(SCART, RGB)
- ⑬ Yellow = Feature Menu
- ⑭ Blue = Installation Menu
- ⑮ = Hold
- ⑯ = Update
- ⑰ = Index Page
- ⑱ = Reveal
- ⑲ = Expand
- ⑳ = Mix
- ㉑ = Teletext
- ㉒ = Time
- ㉓ Red = Sound Menu
- ㉔ Green = Picture Menu
- ㉕ = Mute
- ㉖ I-II = No function
- ㉗ = - Volume
- ㉘ = - Program
- ㉙ = Flash back button
- ㉚ M = Menu
- ㉛ = Cursor Down
- ㉜ = Cursor Left

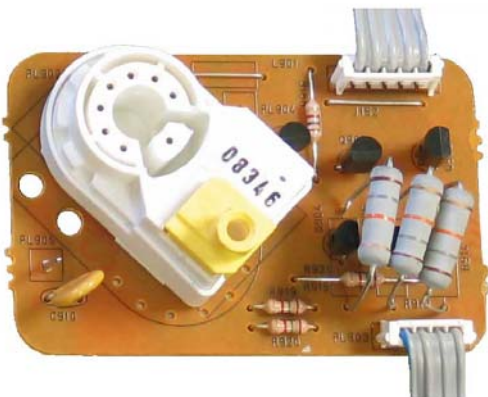


CHASSIS LAYOUT

Mother Unit



CRT Unit



Front Unit



PARTS LISTING

REPLACEMENT PARTS

Replacement parts which have special safety characteristics are identified in this manual. Electrical components having such features are identified by in the Replacement Parts Listing.

The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended is not permitted.

Replacement parts not shown in this service manual may create shock fire, or other hazards.

HOW TO ORDER REPLACEMENT PARTS

To have your order completed promptly and correctly please supply the following information.

1. MODEL NUMBER
2. REF. NO.
3. PART NO. (*)
4. DESCRIPTION
5. CODE
6. QUANTITY

(*) When ordering any part, a "V" should be added before the Part No.

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
PICTURE TUBE				
A	30002747	14" CPT TUBE SAFE	BL	CC
A	30002952	14" DEG COIL & EARTH CB. SAFE (SHARP)	AE	AP
TUNER				
TU201	30009637	TUNER WSP (PLL) CTF5510A	AR	BC
INTEGRATED CIRCUITS				
IC1	30001669	PREAMPLIFIER TFMS1380	AD	AM
IC403	30026922	IC STV2248H (SHRINK56)	AR	BC
A	IC404	30001612 IC TDA2822M	AD	AN
IC500	20144991	IC 24C08 X60117030310122105 (SHARP)	AA	AE
IC501	20164253	PR. IC. 36/44-SHARP 36_44_B28	AT	BD
IC600	30015306	IC TDA8174AW	AD	AN
IC810	30001668	IC LM317T	AC	AH
IC841	30001627	IC KA3842A	AP	BA
IC842	30001622	IC 7805 (1A)	AB	AF
TRANSISTORS				
Q103	30001457	TR BC848B SMD	AA	AC
Q104	30001457	TR BC848B SMD	AA	AC
Q455	30001457	TR BC848B SMD	AA	AC
Q456	30001457	TR BC848B SMD	AA	AC
Q457	30001457	TR BC848B SMD	AA	AC
Q458	30001457	TR BC848B SMD	AA	AC
Q459	30001457	TR BC848B SMD	AA	AC
Q460	30001457	TR BC848B SMD	AA	AC
Q501	30001458	TR BC858B SMD	AA	AB
Q601	30013656	TR POWER STX112-AP	AA	AE
Q602	30001448	TR BU808DFI	AF	AQ
Q603	30001457	TR BC848B SMD	AA	AC
Q801	30001385	TR MTP3N60E (PLASTIC)	AE	AP
Q803	30001457	TR BC848B SMD	AA	AC
Q805	30014346	IC 78L05 TO-92 (100mA)	AA	AE
Q901	30001461	TR 2SC2482	AA	AD
Q902	30001461	TR 2SC2482	AA	AD
Q903	30001461	TR 2SC2482	AA	AD
Q904	30001426	TR BF421	AA	AD
Q905	30001426	TR BF421	AA	AD
Q906	30001426	TR BF421	AA	AD
DIODES				
D1	30001279	LED RED/GREEN LTL293SJ	AC	AH
D101	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D102	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D103	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D104	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
D105	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D106	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D107	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D108	30009699	DIODE ZENER SMD BZT55C12	AA	AB
D109	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D110	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D111	30003720	DIODE ZENER BZT55C5V6 5.6V SMD	AA	AB
D2	30001371	DIODE ZENER 5.1V ZPD	AA	AB
D3	30001371	DIODE ZENER 5.1V ZPD	AA	AB
D402	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D403	30001285	DIODE 1N4148 SMD	AA	AB
D404	30012411	DIODE BA782 SMD	AA	AD
D405	30012411	DIODE BA782 SMD	AA	AD
D406	30001285	DIODE 1N4148 SMD	AA	AB
D407	30001285	DIODE 1N4148 SMD	AA	AB
D410	30018576	DIODE ZENER BZT55C8V2 8.2V SMD	AA	AB
D411	30018576	DIODE ZENER BZT55C8V2 8.2V SMD	AA	AB
D412	30018576	DIODE ZENER BZT55C8V2 8.2V SMD	AA	AB
D413	30009699	DIODE ZENER SMD BZT55C12	AA	AB
D414	30009699	DIODE ZENER SMD BZT55C12	AA	AB
D501	30001285	DIODE 1N4148 SMD	AA	AB
D502	30007761	DIODE ZENER SMD BZT55C3V6	AA	AB
D503	30001284	DIODE 1N4148 0.15A/100V 0.5A	AA	AB
D504	30001284	DIODE 1N4148 0.15A/100V 0.5A	AA	AB
D505	30001377	DIODE ZENER 33V UZT 33B	AB	AF
D601	30001329	DIODE 1N4007 1A/1000V 30A	AA	AB
D602	30001285	DIODE 1N4148 SMD	AA	AB
D604	30001318	DIODE BA159 1A/800V 20A	AA	AB
D605	30001318	DIODE BA159 1A/800V 20A	AA	AB
D606	30001318	DIODE BA159 1A/800V 20A	AA	AB
D609	30001284	DIODE 1N4148 0.15A/100V 0.5A	AA	AB
D610	30009699	DIODE ZENER SMD BZT55C12	AA	AB
D801	30001285	DIODE 1N4148 SMD	AA	AB
D802	30001318	DIODE BA159 1A/800V 20A	AA	AB
D803	30001331	DIODE 1N4937 1A/600V 30A	AA	AD
D804	30001288	DIODE BYV27-200 2A/200V 50A	AA	AD
D805	30001301	DIODE BYM26D 2.3A/800V 45-150A	AB	AF
D806	30001288	DIODE BYV27-200 2A/200V 50A	AA	AD
D811	30001318	DIODE BA159 1A/800V 20A	AA	AB
D813	30001318	DIODE BA159 1A/800V 20A	AA	AB
D837	30001318	DIODE BA159 1A/800V 20A	AA	AB
D838	30001318	DIODE BA159 1A/800V 20A	AA	AB
D839	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D840	30001285	DIODE 1N4148 SMD	AA	AB
D901	30001285	DIODE 1N4148 SMD	AA	AB
D902	30001285	DIODE 1N4148 SMD	AA	AB
D903	30001285	DIODE 1N4148 SMD	AA	AB
PACKAGED CIRCUITS				
X401	30001749	XTAL 4.433619 MHZ (AK15)	AC	AK
X402	30015592	XTAL 3.579545 (WO/LOAD CAP)	AB	AG
X403	30000074	CAP MKT 100NF 63V J	AA	AC
X501	30002851	XTAL 4MHZ L.C=30PF	AC	AH
COILS				
L1	30001996	FIXED COIL 22UH Q40 K	AA	AB
L101	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L107	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L108	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L109	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L110	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L2	30001996	FIXED COIL 22UH Q40 K	AA	AB
L201	30001992	FIXED COIL 10UH Q65 K-A	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
L202	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L204	30001984	FIXED COIL 2.2UH Q55 M-AX	AA	AB
L402	30001992	FIXED COIL 10UH Q65 K-A	AA	AB
L403	30001990	FIXED COIL 6.8UH Q75 K	AA	AB
L404	30001987	FIXED COIL 4.7UH Q70 K-A	AA	AB
L406	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L407	30001992	FIXED COIL 10UH Q65 K-A	AA	AB
L408	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L409	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L410	30001992	FIXED COIL 10UH Q65 K-A	AA	AB
L411	30001992	FIXED COIL 10UH Q65 K-A	AA	AB
△ L801	30002100	LINE FILTER SAFE 2*27MH	AC	AH
L802	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L803	30001984	FIXED COIL 2.2UH Q55 M-AX	AA	AB
L804	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L805	30001971	FERRITE BEAT (805) BLM21A601S	AA	AD
L811	30001990	FIXED COIL 6.8UH Q75 K	AA	AB
CERAMIC FILTERS				
Z401	30001728	TRIPLE TRAP TPT02B	AG	AT
Z403	30001690	FILTER SAW K2962M	AH	AU
Z404	30001707	FILTER SAW L9453M	AH	AU
TRANSFORMERS				
△ TR601	30017788	TRF FBT SAFE 90° (AK30,AK36 LAYER TYPE)	AT	BE
△ TR801	30015302	TRF SMPS SAFE AK36 90° (170-270V)	AF	AR
CAPACITORS				
C1	30000371	CAP EL 22UF 50V M	AA	AB
C101	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C103	30000371	CAP EL 22UF 50V M	AA	AB
C104	30012589	CAP SMD 4.7NF 50V K (0603)	AA	AB
C108	30012589	CAP SMD 4.7NF 50V K (0603)	AA	AB
C201	30000400	CAP EL 47UF 50V M	AA	AB
C206	30000371	CAP EL 22UF 50V M	AA	AB
C207	30012610	CAP SMD 10NF 50V J (0603)	AA	AB
C208	30012610	CAP SMD 10NF 50V J (0603)	AA	AB
C401	30000345	CAP EL 10UF 50V M	AA	AB
C402	30012610	CAP SMD 10NF 50V J (0603)	AA	AB
C403	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C404	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C405	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C406	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C408	30000074	CAP MKT 100NF 63V J	AA	AC
C409	30000384	CAP EL 2.2UF 50V M	AA	AB
C411	30000074	CAP MKT 100NF 63V J	AA	AC
C412	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C413	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C415	30000362	CAP EL 1UF 50V M	AA	AB
C416	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C417	30000362	CAP EL 1UF 50V M	AA	AB
C418	30000362	CAP EL 1UF 50V M	AA	AB
C419	30000074	CAP MKT 100NF 63V J	AA	AC
C420	30000345	CAP EL 10UF 50V M	AA	AB
C421	30012581	CAP SMD 1NF 50V K R (0603)	AA	AB
C422	30000100	CAP MKT 330NF 63V J	AA	AD
C423	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C424	30000109	CAP MKT 470NF 63V J	AA	AD
C425	30000074	CAP MKT 100NF 63V J	AA	AC
C427	30000362	CAP EL 1UF 50V M	AA	AB
C428	30000362	CAP EL 1UF 50V M	AA	AB
C429	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C431	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
C432	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C433	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C434	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C435	30012585	CAP SMD 2.2NF 50V K R (0603)	AA	AB
C436	30000109	CAP MKT 470NF 63V J	AA	AD
C438	30000384	CAP EL 2.2UF 50V M	AA	AB
C440	30012589	CAP SMD 4.7NF 50V K (0603)	AA	AB
C441	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C442	30000362	CAP EL 1UF 50V M	AA	AB
C443	30000345	CAP EL 10UF 50V M	AA	AB
C451	30012567	CAP SMD 220PF 50V J (0603)	AA	AB
C455	30000345	CAP EL 10UF 50V M	AA	AB
C458	30012567	CAP SMD 220PF 50V J (0603)	AA	AB
C459	30000345	CAP EL 10UF 50V M	AA	AB
C460	30000371	CAP EL 22UF 50V M	AA	AB
C463	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C465	30012575	CAP SMD 4.7PF 50V C CH (0603)	AA	AA
C466	30000345	CAP EL 10UF 50V M	AA	AB
C467	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C468	30012574	CAP SMD 470PF 50V J (0603)	AA	AA
C501	30000074	CAP MKT 100NF 63V J	AA	AC
C502	30000396	CAP EL 47UF 16V M	AA	AB
C503	30012603	CAP SMD 100NF 25V K R (0603)	AA	AB
C504	30012589	CAP SMD 4.7NF 50V K (0603)	AA	AB
C508	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C509	30012566	CAP SMD 22PF 50V J (0603)	AA	AB
C511	30000371	CAP EL 22UF 50V M	AA	AB
C512	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C513	30012579	CAP SMD 82PF 50V J (0603)	AA	AB
C514	30000100	CAP MKT 330NF 63V J	AA	AD
C515	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C516	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C518	30012560	CAP SMD 100PF 50V J (0603)	AA	AB
C519	30012562	CAP SMD 15PF 50V J (0603)	AA	AA
C520	30012562	CAP SMD 15PF 50V J (0603)	AA	AA
C521	30012585	CAP SMD 2.2NF 50V K R (0603)	AA	AB
C523	30012566	CAP SMD 22PF 50V J (0603)	AA	AB
C526	30012589	CAP SMD 4.7NF 50V K (0603)	AA	AB
C529	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C532	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C534	30000431	CAP CER 100PF 1KV M	AA	AC
C535	30006753	CAP CER 220PF 1KV K B	AA	AB
C536	30012607	CAP SMD 150PF 50V J (0603)	AA	AA
C538	30012560	CAP SMD 100PF 50V J (0603)	AA	AB
C539	30000400	CAP EL 47UF 50V M	AA	AB
C540	30000315	CAP SMD 220NF 25V Z (0805)	AA	AB
C541	30012590	CAP SMD 47NF 50V K (0603)	AA	AA
C542	30010571	CAP EL 10UF 16V M	AA	AA
C602	30000107	CAP MKT 47NF 250V J	AA	AD
C603	30000100	CAP MKT 330NF 63V J	AA	AD
C604	30018416	CAP EL 470UF 16V M 105°	AA	AB
C605	30000354	CAP EL 100UF 35V M	AA	AC
C606	30000092	CAP MKT 220NF 63V J	AA	AD
C607	30000078	CAP MKT 1UF 100V M	AB	AF
C609	30000371	CAP EL 22UF 50V M	AA	AB
C610	30000360	CAP EL 1000UF 25V M	AA	AE
△ C611	30000179	CAP MKP SAFE 9.1NF 1600V %3.5	AB	AG
C613	30000350	CAP EL 10UF 250V M	AA	AD
△ C616	30000156	CAP MKP SAFE 430NF 250V J	AB	AF
C617	30007750	CAP EL 470UF 35V (H/R 1150MA)	AA	AD
C618	30000092	CAP MKT 220NF 63V J	AA	AD
C619	30000384	CAP EL 2.2UF 50V M	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE	REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
C620	30000315	CAP SMD 220NF 25V Z (0805)	AA	AB	R118	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C641	30000345	CAP EL 10UF 50V M	AA	AB	R119	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C643	30000394	CAP EL 3.3UF 160V M	AA	AC	R122	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C644	30000345	CAP EL 10UF 50V M	AA	AB	R123	30014128	RES SMD 1/16W 33R J (0603)	AA	AB
C645	30000362	CAP EL 1UF 50V M	AA	AB	R125	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C646	30012581	CAP SMD 1NF 50V K R (0603)	AA	AB	R126	30012695	RES SMD 1/16W 470R J (0603)	AA	AB
C647	30000116	CAP MKT 68NF 63V J	AA	AC	R127	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C648	30012609	CAP SMD 68NF 50V K (0603)	AA	AB	R128	30000459	RES CF 1/4W 100R J	AA	AB
C649	30012573	CAP SMD 47PF 50V J (0603)	AA	AB	R129	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
C650	30000294	CAP SMD 100NF 50V K (0805)	AA	AB	R130	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
C651	30000074	CAP MKT 100NF 63V J	AA	AC	R131	30012649	RES SMD 1/16W 150R J (0603)	AA	AB
△ C801	30000094	CAP MKT SAFE 220NF 275V M AC	AA	AB	R132	30012649	RES SMD 1/16W 150R J (0603)	AA	AB
△ C802	30000084	CAP MKT SAFE 150NF 275V M AC P=15	AC	AG	R2	30000526	RES CF 1/4W 1.5K J	AA	AB
C805	30012585	CAP SMD 2.2NF 50V K R (0603)	AA	AB	R201	30012674	RES SMD 1/16W 27K J (0603)	AA	AB
C806	30012574	CAP SMD 470PF 50V J (0603)	AA	AA	R203	30000583	RES CF 1/4W 220R J	AA	AB
C807	30000090	CAP MKT 22NF 100V J	AA	AB	R204	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
C808	30000418	CAP EL 100UF 400V M	AH	AU	R206	30000583	RES CF 1/4W 220R J	AA	AB
C810	30000315	CAP SMD 220NF 25V Z (0805)	AA	AB	R3	30000689	RES CF 1/4W 3.9K J	AA	AB
C811	30000345	CAP EL 10UF 50V M	AA	AB	R4	30000712	RES CF 1/4W 470R J	AA	AB
△ C812	30000161	CAP MKP SAFE 47NF 630V J	AB	AE	R401	30014076	RES SMD 1/16W 4.7R J (0603)	AA	AA
△ C814	30000447	CAP CER SAFE 4.7NF 4KV M E	AB	AG	R402	30014076	RES SMD 1/16W 4.7R J (0603)	AA	AA
C815	30000294	CAP SMD 100NF 50V K (0805)	AA	AB	R408	30000466	RES CF 1/4W 1K J	AA	AB
C816	30013533	CAP CER 100PF 1KV K (PULSE)	AA	AC	R409	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
C817	30000431	CAP CER 100PF 1KV M	AA	AC	R410	30012707	RES SMD 1/16W 680R J (0603)	AA	AB
C818	30000433	CAP CER 1NF 1KV M B	AA	AB	R411	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
C819	30000382	CAP EL 220UF 16V M	AB	AF	R412	30012667	RES SMD 1/16W 220K J (0603)	AA	AB
C820	30028072	CAP EL 100UF 200V M (HR)	AE	AQ	R413	30000712	RES CF 1/4W 470R J	AA	AB
C821	30000294	CAP SMD 100NF 50V K (0805)	AA	AB	R414	30012649	RES SMD 1/16W 150R J (0603)	AA	AB
C822	30018416	CAP EL 470UF 16V M 105°	AA	AB	R415	30012683	RES SMD 1/16W 330K J (0603)	AA	AB
C823	30000352	CAP EL 100UF 16V M	AA	AB	R416	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C824	30000352	CAP EL 100UF 16V M	AA	AB	R417	30012650	RES SMD 1/16W 15K J (0603)	AA	AB
C825	30000352	CAP EL 100UF 16V M	AA	AB	R418	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
C826	30000092	CAP MKT 220NF 63V J	AA	AD	R419	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
C827	30006909	CAP EL 100UF M 250V	AC	AG	R420	30000466	RES CF 1/4W 1K J	AA	AB
C828	30013533	CAP CER 100PF 1KV K (PULSE)	AA	AC	R421	30012674	RES SMD 1/16W 27K J (0603)	AA	AB
C829	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	R422	30012662	RES SMD 1/16W 2.7K J (0603)	AA	AB
C832	30009208	CAP CER 470PF 1KV K (PULSE)	AA	AC	R423	30012714	RES SMD 1/16W 820R J (0603)	AA	AA
C834	30007308	CAP CER 220PF 1KV K (PULSE)	AA	AD	R424	30012714	RES SMD 1/16W 820R J (0603)	AA	AA
C837	30009208	CAP CER 470PF 1KV K (PULSE)	AA	AC	R425	30012714	RES SMD 1/16W 820R J (0603)	AA	AA
C839	30000294	CAP SMD 100NF 50V K (0805)	AA	AB	R426	30000718	RES CF 1/4W 4.7K J	AA	AB
C840	30000294	CAP SMD 100NF 50V K (0805)	AA	AB	R427	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
C841	30000345	CAP EL 10UF 50V M	AA	AB	R428	30012696	RES SMD 1/16W 47K J (0603)	AA	AB
C842	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	R429	30000466	RES CF 1/4W 1K J	AA	AB
C905	30012568	CAP SMD 270PF 50V J (0603)	AA	AA	R430	30000466	RES CF 1/4W 1K J	AA	AB
C907	30012568	CAP SMD 270PF 50V J (0603)	AA	AA	R431	30000466	RES CF 1/4W 1K J	AA	AB
C909	30012568	CAP SMD 270PF 50V J (0603)	AA	AA	R432	30000590	RES CF 1/4W 2.2K J	AA	AB
C910	30000434	CAP CER 1NF 2KV K B	AA	AB	R433	30000712	RES CF 1/4W 470R J	AA	AB
C911	30012579	CAP SMD 82PF 50V J (0603)	AA	AB	R434	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
C912	30012579	CAP SMD 82PF 50V J (0603)	AA	AB	R435	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB
C913	30012579	CAP SMD 82PF 50V J (0603)	AA	AB	R436	30012674	RES SMD 1/16W 27K J (0603)	AA	AB
C915	30012567	CAP SMD 220PF 50V J (0603)	AA	AB	R437	30012642	RES SMD 1/16W 120K J (0603)	AA	AA
C916	30012567	CAP SMD 220PF 50V J (0603)	AA	AB	R457	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
C917	30012567	CAP SMD 220PF 50V J (0603)	AA	AB	R460	30012698	RES SMD 1/16W 5.6K J (0603)	AA	AB
		RESISTORS			R461	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R10	30000466	RES CF 1/4W 1K J	AA	AB	R462	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R101	30012509	RES SMD 1/16W 100K J (0603)	AA	AB	R463	30012696	RES SMD 1/16W 47K J (0603)	AA	AB
R110	30012713	RES SMD 1/16W 75R J (0603)	AA	AB	R464	30012696	RES SMD 1/16W 47K J (0603)	AA	AB
R111	30012713	RES SMD 1/16W 75R J (0603)	AA	AB	R465	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB
R113	30012713	RES SMD 1/16W 75R J (0603)	AA	AB	R467	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R115	30012713	RES SMD 1/16W 75R J (0603)	AA	AB	R468	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R117	30012986	RES SMD 1/16W 68R J (0603)	AA	AA	R469	30012683	RES SMD 1/16W 330K J (0603)	AA	AB
					R470	30000670	RES CF 1/4W 330K J	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
R474	30000748	RES CF 1/4W 5.6K J	AA	AB
R477	30012662	RES SMD 1/16W 2.7K J (0603)	AA	AB
R478	30014022	RES SMD 1/16W 47R J (0603)	AA	AA
R479	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
R480	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
R481	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
R5	30000770	RES CF 1/4W 680R J	AA	AB
R502	30012695	RES SMD 1/16W 470R J (0603)	AA	AB
R503	30012707	RES SMD 1/16W 680R J (0603)	AA	AB
R504	30012679	RES SMD 1/16W 3.9K J (0603)	AA	AB
R507	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R508	30014022	RES SMD 1/16W 47R J (0603)	AA	AA
R509	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R510	30012673	RES SMD 1/16W 270R J (0603)	AA	AB
R511	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB
R512	30000459	RES CF 1/4W 100R J	AA	AB
R513	30000459	RES CF 1/4W 100R J	AA	AB
R514	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R515	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
R516	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
R517	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
R520	30012698	RES SMD 1/16W 5.6K J (0603)	AA	AB
R526	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R528	30012668	RES SMD 1/16W 220R J (0603)	AA	AA
R529	30000590	RES CF 1/4W 2.2K J	AA	AB
R530	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R531	30012698	RES SMD 1/16W 5.6K J (0603)	AA	AB
R533	30012698	RES SMD 1/16W 5.6K J (0603)	AA	AB
R534	30000500	RES CF 1/4W 12K J	AA	AB
R535	30012506	RES SMD 1/16W 1.5K J (0603)	AA	AB
R537	30000471	RES CF 1/4W 10K J	AA	AB
R541	30000500	RES CF 1/4W 12K J	AA	AB
R542	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB
R546	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
R547	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R549	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
R560	30000525	RES CF 1/2W 1.5K J	AA	AB
R563	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
R564	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R565	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R566	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R568	30000459	RES CF 1/4W 100R J	AA	AB
R6	30000622	RES CF 1/4W 270R J	AA	AB
R601	30000723	RES CF 1/4W 47K J	AA	AB
R602	30012642	RES SMD 1/16W 120K J (0603)	AA	AA
R603	30012711	RES SMD 1/16W 75K J (0603)	AA	AA
R604	30000718	RES CF 1/4W 4.7K J	AA	AB
R605	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R607	30015578	RES SMD 1/16W 2.2R J (0603)	AA	AA
R609	30001145	RES MO 1W 33R J	AA	AB
R610	30000519	RES CF 1/4W 150R J	AA	AB
R612	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB
R613	30000828	RES CF 1/4W 8.2M J	AA	AB
R614	30000471	RES CF 1/4W 10K J	AA	AB
R615	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
R616	30001145	RES MO 1W 33R J	AA	AB
R617	30012677	RES SMD 1/16W 3.3K J (0603)	AA	AA
R618	30000769	RES CF 1/2W 680R J	AA	AB
R619	30000910	RES MF 1/2W 1.8R G	AA	AB
R620	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
R623	30000869	RES MF 1/4W 12K J	AA	AB
R624	30000594	RES CF 1/4W 22K J	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
R625	30000469	RES SMD 1/10W 1K J 0805	AA	AB
R626	30001215	RES FUSE SAFE 1W 1R J	AA	AC
R627	30000718	RES CF 1/4W 4.7K J	AA	AB
R628	30014941	RES CF 1/4W 16K J	AA	AA
R629	30000594	RES CF 1/4W 22K J	AA	AB
R631	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB
R632	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R633	30000564	RES CF 1/4W 18K J	AA	AB
R634	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
R635	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB
R636	30006757	RES MO 1W 560R J	AA	AB
△ R637	30001225	RES FUSE SAFE 1/4W 0.22R J	AA	AC
R638	30006757	RES MO 1W 560R J	AA	AB
R640	30002731	RES SMD 1/10W 68R J	AA	AB
R641	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R7	30000744	RES CF 1/4W 560R J	AA	AB
R8	30000744	RES CF 1/4W 560R J	AA	AB
R801	30000983	RES MF 1/4W 4.7K F	AA	AB
R802	30012642	RES SMD 1/16W 120K J (0603)	AA	AA
R803	30007207	RES SMD 1/10W 22K F	AA	AA
R804	30000466	RES CF 1/4W 1K J	AA	AB
R805	30000466	RES CF 1/4W 1K J	AA	AB
R807	30001157	RES MO 1W 330K J	AA	AA
R808	30000452	RES CF 1/4W 10R J	AA	AB
R809	30001183	RES MO 2W 56K J	AA	AA
R810	30017136	RES MO 1W 0.56R J	AA	AA
△ R811	30001257	RES MG SAFE 1/2W 4.7M J	AA	AD
R813	30000470	RES CF 1/2W 10K J	AA	AA
R814	30000649	RES CF 1/2W 33R J	AA	AB
R815	30000524	RES SMD 1/10W 150R J (0805)	AA	AB
R816	30000470	RES CF 1/2W 10K J	AA	AA
R817	30000594	RES CF 1/4W 22K J	AA	AB
R820	30000469	RES SMD 1/10W 1K J 0805	AA	AB
△ R821	30001229	RES FUSE SAFE 1W 2.2R J	AA	AC
R821	30001235	RES FUSE SAFE 1/2W 0.33R J	AA	AB
R828	30001185	RES MO 2W 5.6R J	AA	AB
R829	30012714	RES SMD 1/16W 820R J (0603)	AA	AA
△ R830	30001245	RES FUSE SAFE 1/4W 0.47R J	AA	AC
R831	30012677	RES SMD 1/16W 3.3K J (0603)	AA	AA
△ R832	30018085	CAP VAR SAFE 510V K MFCN14D511	AA	AD
R9	30000466	RES CF 1/4W 1K J	AA	AB
R901	30012688	RES SMD 1/16W 390R J (0603)	AA	AA
R902	30012688	RES SMD 1/16W 390R J (0603)	AA	AA
R903	30012688	RES SMD 1/16W 390R J (0603)	AA	AA
R904	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB
R905	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB
R906	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB
R907	30014022	RES SMD 1/16W 47R J (0603)	AA	AA
R908	30014022	RES SMD 1/16W 47R J (0603)	AA	AA
R909	30014022	RES SMD 1/16W 47R J (0603)	AA	AA
R910	30012695	RES SMD 1/16W 470R J (0603)	AA	AB
R911	30012695	RES SMD 1/16W 470R J (0603)	AA	AB
R912	30012695	RES SMD 1/16W 470R J (0603)	AA	AB
R913	30001116	RES MO 2W 18K J	AA	AB
R914	30001116	RES MO 2W 18K J	AA	AB
R915	30001116	RES MO 2W 18K J	AA	AB
R916	30000459	RES CF 1/4W 100R J	AA	AB
R917	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
R918	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
R919	30000526	RES CF 1/4W 1.5K J	AA	AB
R920	30000526	RES CF 1/4W 1.5K J	AA	AB
R921	30000526	RES CF 1/4W 1.5K J	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
		MISCELLANEOUS PARTS		
A-H ARASINA	30009833	CABL 1P/100 SIS	AA	AB
.	20000848	FUSE ASSY.TK79-A (2.5A)	AA	AD
I-B ARASINA	30009846	CABL 1P/40 SIS	AA	AB
J128	30002002	FIXED COIL 47UH Q60 K	AA	AB
J142	30000461	RES CF 1/6W 100R J	AA	AB
J168	30001992	FIXED COIL 10UH Q65 K-A	AA	AB
JK1	30001900	JACK HEADPHONE HP01/2/3/4/5/6	AD	AM
LX810	30010964	FERRITE BEAT(805) BLM21A601RPT	AA	AB
PL1	30016521	CNAS 2P/150 TB FLT W/C W/UL2468AWG24	AA	AE
PL102	30015053	SOCKET SCART NEW TYPE	AB	AF
PL2	30002243	CNASY 5P/220 W/UL	AA	AE
PL3	30002762	CNAS 2P/250 SPK SIS W/C UL1007AWG24	AA	AD
PL4	30001829	CONN HEADER 2P 2.5MM TOP WHT SD	AA	AB
PL403	30001829	CONN HEADER 2P 2.5MM TOP WHT SD	AA	AB
PL404	30017088	CNAS 5P/300 AK36 FLT W/CABLH UL2468AWG24	AA	AD
PL504	30001783	CONN HEADER 5P 2.5MM TOP BD	AA	AC
PL506	30001829	CONN HEADER 2P 2.5MM TOP WHT SD	AA	AB
PL507	30007732	CNAS 1P/300 AQUA DIS W/CLIPS	AA	AB
PL509	30006709	CONN HEADER 5P 2.5MM TOP WHT SD	AA	AB
PL601	30001829	CONN HEADER 2P 2.5MM TOP WHT SD	AA	AB
PL602	30017089	CNAS 3P-4/300 FLT W/CABLH UL2468AWG24	AA	AC
PL603	30001792	CONN HEADER 2P 7.5MM TOP WHT	AA	AC
PL802	30001792	CONN HEADER 2P 7.5MM TOP WHT	AA	AC
PL803	30001795	CONN HEADER 3P 5/7.5MM TOP WHT	AA	AC
△ PL902	30001860	SOCKET CRT SAFE MININECK METALLO	AD	AM
PL905	35000135	TEST PIN 1.1MM	AA	AB
SW1	30002181	SWITCH TACT(4)	AA	AC
SW2	30002181	SWITCH TACT(4)	AA	AC
SW3	30002181	SWITCH TACT(4)	AA	AC
SW4	30002181	SWITCH TACT(4)	AA	AC
SW5	30002181	SWITCH TACT(4)	AA	AC
△ SW801	30017848	SWITCH SAFE ON/OFF 4A/128A JVC(PANASONI)	AC	AH
△ TH800	30001270	PTC SAFE 9 OHM	AC	AK
VL405	30026042	ADJ.COIL VIF 44MHZ Q=64 C=39pF (AK36)	AA	AD
.	30001954	SPEAKER 16R 3W 3"	AE	AP
.	30017090	CNAS 2P/350 SPK SIS W/C W/UL1007AWG24	AA	AD
△ .	20140518	BACK CVR.1462 EKO2GRAY (I)	AH	AT
.	20140991	BUTTON ASSY 1462(FUNC.SILV-ON/OFF O.BLUE)	AB	AF
.	20004646	FOOT RUBBER 3730/31/40/41	AA	AD
.	35008861	SPRING ON/OFF SWITCH 1462 SHARP(SHARP)	AA	AA
.	20141192	SNOW BOX ASSY 1462 (SHARP)	AC	AH
.	20140521	SNOW BOX TOP 1462	AB	AE
.	20140522	SNOW BOX BOTTOM 1462	AB	AE
.	20141193	SCR.ASSY.1462	AB	AF
.	35000212	SCREW S C ZNSY YSMB 2.9*13	AA	AB
.	35001777	SCREWS CZNORYAKB 5x30 WITH	AA	AB
.	35004572	SCREW P C AgSYF YSB 4x20	AA	AB
.	35005051	SCREW P C ZN RYSM 4x16 (HITACHI) (R:16)	AA	AB
.	20144992	CHS.ASSY.36-143K11142118F	BG	BY
△ F801	30001731	FUSE SAFE 2.5A 250V 5*20MM	AA	AC
.	35000136	FUSE HOLDER TK79-A (GRAY)	AA	AD
.	30025287	AK36 SMT SHIELD	AA	AD
△ .	20069674	FIRE BARRIER (I)(NATURAL-V.0) (AK36)	AA	AC
.	20144991	IC 24C08 X60117030310122105(SHARP)	AA	AE
.	30006987	IC 24C08 (WP)	AC	AH
.	20151304	POWER CORD ASSY.(2.4MT W/FTZ)(LONGWELL)	AD	AM
.	20152032	MD.ASY.TK140-HP 5SW 1462 AK36	AH	AT
△ .	30028208	POWER CORD SAFE EURO 2.2M SHARP W/FILTER	AG	AT
.	40017873	LED HOLDER (SHARP)	AA	AC
.	20067214	PCB GUIDE RAIL (HIGH BIG) (I)	AD	AK

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
.	20067215	PCB GUIDE RAIL (HIGH SMALL)	AA	AA
.	20090589	PW&AK36 BRACKETI (I)	AA	AA
.	20116237	BRACKET POWER SWITCH (I)	AA	AA
.	40017363	CABLE HOLDER 2162_SF SHARP	AA	AC
.	30017781	CNAS 2P/350 VRT SIS W/C UL1007AWG24	AA	AD
.	30017782	CNAS 2P/350 HRT DIS W/C UL1007AWG24	AA	AD
.	35000014	EARTH SPRING (2CM)	AA	AB
△ .	20154857	FRONT 1462 W/H&J SLV285S(P)	AP	AZ
.	20147245	LBL.BCK.CVR.ASSY (TV) (WO/UL)SHARP	AA	AC
.	50043775	LABEL LOT W/BARCODE (39X89)	AA	AB
.	50043776	LABEL LOT W/BARCODE (100X280) SHARP	AA	AC
.	20143026	R/C 1548 SHARP (EKO2GRAY/I) (GRAY/S)	AM	AY
.	50052044	I/B SHARP 14LT45C P/92195/1548/EPMSRR	AF	AR
.	40016816	LOGO SHARP (W/P-SYLVER BRUSH-HST)	AB	AF

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